LB 1861 .C57x P8 2007

M37

c. 2

EVALUATION OF YEAR ROUND EDUCATION:
DOES IT INCREASE ISAT READING SCORES IN
THIRD AND EIGHTH GRADE STUDENTS?

MARLETT



EASTERN ILL. UNIV. LIBRARY



# DATE DUE

11/11			
YMANA HI			
2337	2		
-807K	*1		
1975173	<del>70</del>		
<u>पत्रमधीन ३</u> २८-१६-६९			
-		ļ	<del> </del>
	<b></b>		<del> </del>
			<del> </del>
	ļ		
		-	

Demco, Inc. 38-293

# THESIS REPRODUCTION CERTIFICATE

TO: Graduate Degree Candidates (who have written formal theses) SUBJECT: Permission to Reproduce Theses The University Library is receiving a number of request from other institutions asking permission to reproduce dissertations for inclusion in their library holdings. Although no copyright laws are involved, we feel that professional courtesy demands that permission be obtained from the author before we allow these to be copied. PLEASE SIGN ONE OF THE FOLLOWING STATEMENTS: Booth Library of Eastern Illinois University has my permission to lend my thesis to a reputable college or university for the purpose of copying it for inclusion in that institution's library or research holdings. Author's Signature Date respectfully request Booth Library of Eastern Illinois University NOT allow my thesis to be reproduced because:

Date

 $http://www.eiu.edu/~graduate/thesis reproduce.htm\ (1\ of\ 2)12/8/2004\ 12:48:45\ PM$ 

luthor's Signature

## Evaluation of Year Round Education: Does It Increase ISAT Reading Scores in Third and Eighth Grade Students?

BY

### Kristy Marlett

#### **THESIS**

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

### Specialist in School Psychology

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY CHARLESTON, ILLINOIS

2007 YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE

May 2, 2007
Date 7

5/2/07
Date

Department/School Head



RUNNING HEAD: Year Round Education
Evaluation of Year Round Education: Does it increase ISAT reading scores in third and
eighth grade students?
Kristy Marlett
Eastern Illinois University

# Table of Contents

I.	List of Figures	3
II.	List of Tables	4
III.	Acknowledgements	5
IV.	Abstract	6
V.	Introduction: Literature Review	7
	Definitions of Traditional School Calendar and Year-Round Education (YRE)	7
	2. Multi-Track YRE vs. Single-Track YRE	9
	3. Arguments For and Against YRE	12
	4. Statement of the Problem	15
VI.	Methodology	
	1. Participants	16
	2. Instrument	16
	3. Procedure	19
	4. Design and Analysis	19
VII.	Results	20
VIII.	Discussion	21
IX.	References	27
X.	Appendices	
	<ol> <li>Appendix A Sample Third Grade ISAT Reading Passage</li> <li>Appendix B Sample Eighth Grade IAT Reading Passage</li> <li>Appendix C ISAT Reading Extended Response Rubric</li> <li>Appendix D Correspondence with Superintendent</li> </ol>	34 39 43 44

# List of Figures

Figure 1, Estimated Means of Reading Scale Score

page 28

## Year Round Education

## List of Tables

Table 1, Student Demographics	page 29	
Table 2, Analysis of Variance for Reading Scale Score	page 30	

## Acknowledgments

My sincerest thanks to Dr. Assege HaileMariam for spending countless hours supporting this study and offering much needed guidance. Also, thank you to Dr. Ronan Bernas for taking the time to help analyze data and write the results. Thank you to Dr. Mike Havey for his guidance and suggestions. I am also grateful to my parents for dealing with my craziness, and providing me with the guidance and strength I needed to complete this project.

### Abstract

Little is known about how a modified school calendar influences student achievement in reading. The present study investigated how students performed on the ISAT reading test after the district switched to a year-round calendar when compared to scores when the district was using a traditional school calendar. In other words, this longitudinal study attempted to answer if performance on the ISAT is related to the type of calendar, gender, grade level, and receiving special education services. Participants were 900 students in the third and eighth grades of one Illinois school district that transitioned from traditional school calendar to Year Round Education in 2000 - 2001 academic year. A four-way analysis of variance was conducted on ISAT Reading Scale Scores. Type of calendar, student's grade level, gender, and IEP status were used as the predictors, and results indicated that there were no significant four-way or three-way interactions. The theory that YRE increases student achievement was not supported by the results of this study. Longitudinally, only the two-way interaction of grade and IEP status was found to be significant, indicating students with an IEP in third grade scored higher than students with an IEP in eighth grade. However, students with no IEP in third grade had reading scores that were comparable with non-IEP students in the eighth grade, maintaining their reading skills over time. Results from the present study add to the growing research literature that suggests that placement in special education results in a growing gap in student reading achievement. Regardless of placement, regular or special education, the primary implication of this study is that currently there is no strong support for YRE for improving student achievement in reading; and it may be prudent for schools to invest in strategies that have research support for increasing student achievement.



Evaluation of Year Round Education: Does it increase ISAT reading scores in third and eighth grade students?

The primary purpose of the current study is to investigate the relationship between student academic achievement and Year-Round Education (YRE). Although many schools are moving away from the traditional school calendar (TSC) to Year-Round Education, or a balanced school calendar, minimal research has been conducted to determine if YRE has any relationship to student achievement. Before a district spends the time and money necessary to move to YRE, it is not only important, but necessary, to be sure students will benefit from this change. In order to evaluate whether or not students learn more under YRE, this study compared students' achievement scores in reading under a traditional calendar to achievement scores in reading under YRE in one school district. Reading was chosen because research has shown that if children become good readers, they are more likely to become better learners throughout their school years and beyond (National Reading Panel, 2000); therefore, if reading scores increase, one would expect a positive impact on other areas of learning.

### Literature Review

Traditional School Year (TSY) is defined as an educational calendar consisting of 9 months of school attendance followed by 3 months of summer vacation (Kerry & Davies, 1998; and Cooper et al., 2003). On the other hand, although there are variations, YRE is typically defined as learning time distributed across a twelve-month period (Kneese, 1996).

One of the major problems assumed with the traditional school calendar is the supposed learning loss that occurs as a result of the long summer break (Kerry & Davies,

1998; Cooper et al., 2003; Ballinger, 1995; Ballinger, 2000). Cooper et al. suggest that children learn best when instruction is continuous, and the long vacation interrupts instruction, leads to forgetting, and requires a significant amount of time to be spent reviewing the material at the beginning of the next academic year. They also report that the long summer break may have a greater effect on the learning of children with special education needs. Cooper et al.'s review of 39 studies of summer learning loss indicated that achievement test scores decline over summer vacation. They concluded that students lose, on average, between one and three months of learning; and summer vacation increases the already significant differences between middle class and disadvantaged students' reading scores.

Restructuring the school calendar from the traditional nine-month calendar to a YRE has been suggested as one way to address the issues associated with increasing numbers of students with diverse abilities and needs. In YRE, the learning time, distributed across a twelve-month period, may be extended or distributed differently when compared to traditional calendars (Kneese, 1996). Opheim, Hopkins-Mohajer, and Read (2001) defined extension of the school calendar as an increase in the total number of days each child is in school, thus extending the school year to between 220 to 240 days as opposed to the traditional 180 days. Most YRE models fall into the spaced or rearrangement model. This model institutes more frequent shorter breaks throughout the school year with no additional days of instruction, instead of the long summer break (Opheim et al.). According to Kneese, this model falls into two organizational types: single-track and multitrack.

Multitrack vs. Single-Track.

Kneese (1996) and Peltier (1991) reported that in single-track YRE all students are on the same attendance schedule; whereas in multitrack YRE students are assigned to several tracks which are on staggered attendance schedules. One type of single-track YRE is the 45/15 calendar, which provides for nine weeks (45 working days) of continuous learning followed by three weeks (15 working days) of vacation (Kerry & Davies, 1998). In this calendar, students also have a winter break of two weeks, and the remaining two weeks consist of "intersessions" (Kerry & Davies). Intersessions are periods when students attend classes, but they may be related to topics outside the main curriculum (Kerry & Davies). According to Cooper, Valentine, Charlton and Melson (2003), 30% of YRE Schools uses the 45/15 calendar, while another 30% use twelve weeks of continuous learning with one week off, and yet others use five weeks of continuous learning with one week off. Peltier (1991) also presents twelve weeks on. three weeks off and eighteen weeks on, six weeks off options for YRE calendars.

Multitracking is often used to increase the capacity of schools—to save money and increase the number of students they can serve (Kerry & Davies, 1998). Multitrack schools may use any of the single-track options for a YRE calendar. However, in these schools, the students are assigned to different attendance schedules (Kneese, 1996), and while part of the students are in school, the others are on vacation (Peltier, 1991). Students begin the school-year at different times, and vacation schedules for each track are distributed so that one track of students is always out of school (McMillen, 2001).

According to Barber (1996), intersessions provide YRE schools with a tool that traditional schools do not have. Intersessions are typically used for the purpose of



remediation, acceleration or enrichment (Hood & Freeman, 2000). Hood and Freeman defined each type of intersession: a) remediation courses allow students to re-take courses they have failed, complete course requirements not met during the preceding educational block, or address problems in the courses in which they had performed poorly; b) acceleration courses make it possible for students to take required courses prior to the time they would normally be completed and allow them to graduate early; and c) enrichment intersessions allow students to engage in learning experiences that are enjoyable and rarely offered during regular classes. Ballinger (2000) supported this claim, stating that intersessions allow schools to intervene more quickly and dedicate time for special projects.

In 1996, Kneese conducted a meta-analysis of 15 studies from peer-reviewed journals that compared student achievement effects of YRE and the traditional calendar. This review demonstrated that YRE has an overall positive, but very small, effect on academic achievement. However, there were only two single-track studies that met the criteria in order to be included in Kneese's study; the results for those were educationally significant with a weighted effect size of d = .33. When compared to a weighted effect size of d = .08 for multi-track study, Kneese's results indicated single-track YRE has a more positive impact on student achievement than multitrack studies. His metaanlaysis also noted that two studies investigated the effects of YRE on gender, and reported YRE had a more positive effect on males than females. Kneese noted that limitations to this study included: an extremely small number of studies because most did not meet selection criteria; differences in initial achievement; demographic characteristics; and influences unique to different schools and districts were present.

Another meta-analysis was conducted by Cooper et al. (2003). They prefaced all results noting that it is impossible to make strong inferences about the effects of YRE because of weak research designs. This meta-analysis revealed ambiguous results. Out of 58 districts that contributed results to the overall analysis, 36 showed positive effects of YRE and 22 exhibited negative effects. Of the 39 districts that provided enough information to calculate an effect size, the average d index was d = .06. This shows that while overall effects may be positive, the "real-life" implications are minimal at best. Cooper et al. also reported that districts only have slightly better than a 50% chance of finding that students in YRE schools outperform students in traditional schools. Also, the improvement in achievement scores is probably not going to be greater than .10 standard deviation, compared to expected scores had the students attended traditional calendar schools.

Although it is beyond the scope of this study to fully discuss factors other than school calendar that impact learning, it is important to note the influence of parents, teachers, and school structure on student learning. Research has shown that parent involvement has a positive influence on student achievement (Fan & Chen, 2001; Englund et al., 2004; Domina, 2005; Bird 2003); and teacher quality is more closely related to student achievement than other factors including class size, per pupil expenditures, and instructional materials (Lazarus, 2003; Suh & Fore, 2002; Bourke, 1986; Rosenshine & Furst, 1971; "Failing Teachers," 2003); schools can be organized to improve student achievement (Rowan, Bossert, & Dwyer, 1983); and of course, the students themselves impact learning.

Another factor influencing student achievement is placement in special education. The purpose of special education was to bring the performance of students with disabilities closer to that of their peers without disabilities (Kauffman, McGee, & Brigham, 2004). The emphasis in special education has shifted away from normalization, independence and competence, and the result has been students' dependence on the modifications and accommodations they receive through their special education programming (Kauffman, et al.). Orlando and Lynch (1974) noted that special education classes are usually a diluted version of the general curriculum and not developed to meet the individual student's needs. Despite educational reforms, school achievement for many children is far below that of their peers (Orlando & Lynch).

According to Gottesman (1979), students who have been labeled learning disabled do not make the progress expected of them. Her study found that children placed in special classes showed a slower rate of reading achievement than children remaining in regular classes. Gottesman noted that this may be a function of the fact that students receiving special education services had a lower mean IQ than those in the regular classroom. McKinney and Feagans (1984) found similar results in their longitudinal studies of learning disabled students. According to their results, children identified as learning disabled at ages six and seven achieved below age in reading and math, and older learning disabled students were further behind in reading than their same age peers compared to younger learning disabled students (McKinney & Feagans). Reading comprehension showed a linear decline over the three years (McKinney & Feagans). McKinney and Feagans also noted the longitudinal achievement trend

whereby the growing gap between the learning disabled group and the regular education group over time could not be explained by the initial difference in IQ.

Arguments For and Against YRE

YRE is not without its critics. Opponents of YRE state that simply changing the calendar does not address the real issues in education: effective teaching, parent involvement, and a unified curriculum (Cooper et al., 2003). They also present the idea that more frequent breaks will give students more opportunities to forget materials and, therefore, require more time to be used for reviewing material. On the other hand, supporters of YRE, the same authors, noted the importance of multiple, shorter breaks for children who are struggling in school. With traditional school calendars, teachers often cannot implement intensive interventions for these students until summer break, but with YRE, the intervention can be made during an intersession. This keeps the struggling student from falling further and further behind (Cooper et al.).

In addition, according to Hood and Freeman (2000), YRE does not promote cost savings because of increased expenses for air-conditioning, maintenance, and twelve-month teacher and staff salaries. However, proponents have pointed out that YRE gives teachers the opportunity to earn extra income within their professional expertise during their vacation periods by providing instruction for an intersession or extra support for one of the other tracks (Opheim et al., 2001).

Another disadvantage of YRE is that there is no good time for major cleaning and repairs (Peltier, 1991). Administrators have noted a lack of support from the district for services provided by the district when the rest of the district is out of school (i.e., counselors, nurses, food service, etc). Peltier reports that other concerns for the



administration are communication with the student body and faculty, scheduling students, and inadequate clerical and computer support (Peltier; Opheim et al., 2001). Cooper et al. (2003) reported that principals find it difficult to take vacation knowing that their schools are still in session. Opheim et al. found that administrators report that staff development in YRE schools is more difficult because college schedules do not correspond to YRE, making it difficult to have student teachers or interns.

Another scheduling problem arises with extracurricular activities in secondary, multitrack schools (Opheim et al.). According to Cooper et al. (2003), parents fear that activities that compete with or require travel to schools on the traditional calendar will be negatively affected because team members could be on vacation when games or competition occur. Further, the multiple vacation schedules are inconvenient for parents. This is further complicated for parents of multiple students in multitrack schools because even though their children may be in the same school, each child may be on a different track, and, therefore, has a different vacation schedule (Opheim et al., 2001).

Teachers fear that without the long summer break, they will be more susceptible to burnout (Peltier, 1991). However, Opheim et al. (2001) report that administrators and teachers benefit from shorter, more frequent breaks leading to less burnout and tension and reduced absenteeism. In addition to the fear of burnout, teachers have to worry about changing classrooms each term, inadequate storage space and time, and no assistance for packing, moving, and unpacking (Peltier, 1991). Also, many teachers in multitracked schools have to keep their materials in moveable storage closets and change rooms when they return from vacations (Cooper et al., 2003).

### Statement of the Problem

Very little research has been conducted to investigate the relationship YRE has to student achievement. As the foregoing indicates, YRE presents challenges to students, parents, teachers, and administrators alike. Yet, without empirical support for the utility of YRE, more and more schools seem to adopt the model. The results of this study contribute to the current literature and inform teachers, parents, and administrators whether or not YRE is more conducive to student learning when compared to traditional schools. In the absence of such information, school administrators may waste valuable time, money, and effort necessary to move a school district to YRE.

According to Cooper et al. (2003), with traditional school calendars, teachers often cannot implement intensive interventions for struggling students until summer break. With YRE, interventions can be made during an intersession and keeps the struggling student from falling further and further behind. Also, with more frequent breaks as opposed to the long summer break, struggling students should experience less learning loss. Therefore, improvement in reading achievement score is expected to be seen in students receiving special education services during the year-round calendar, as these students should have the opportunity to attend intersessions for teacher remediation. However, the merits of YRE are not well researched, and the few previous studies show ambiguous to minimally positive effects of a modified school calendar (e.g., Cooper et al., 2003; Kneese, 1996).

The primary goal of this study is to answer the following question: Is performance on the ISAT related to the type of calendar, gender, grade level, and receiving special education services overtime?

#### Method

### **Participants**

Participants were 900 students in the third and eighth grades from one Illinois school district (refer to Table 1) that transitioned from traditional school calendar to YRE in 2000 – 2001 academic year. The district has adopted the 45/15 calendar model, where students attend nine weeks of school followed by three weeks of intersessions (vacation).

\*\*Instrument\*

Most public school students in Illinois participate each year in the Illinois

Standards Achievement Test (ISAT), which was designed to measure learning relative to
the Illinois Learning Standards. Testing data from grades third through eighth are
gathered from assessments in reading, math, science and social studies and are reported
in the form of normed scaled scores. Test scores are scaled separately for each grade
level and subject area.

Because the test items change each year, raw scores do not always show the same meaning across forms. According to the *Illinois State Assessment 1999 Technical Manual*, ISAT raw scores are transformed into standard scores; so, numerically equivalent scores represent the same level of proficiency. Individual student scores range from 120 to 200, with a mean of 160 and a standard deviation of 15 (Illinois State Board of Education, ISBE, 1999; ISBE, 2000; ISBE, 2002; ISBE, 2003).

The ISAT reading test assesses material defined by standards associated with three state learning goals (ISBE, 1999; ISBE, 2000; ISBE, 2002; ISBE, 2003). The structure of the test remained the same across the four years; however, passages and

items were changed. The third grade reading assessment is given in three 35-minute sessions (see Appendix A) (ISBE). According to the ISBE, one session consists of 12-15 word analysis questions and one passage followed by 15-17 multiple-choice questions. The other two sessions include one passage followed by 15-20 multiple-choice questions. and one short answer question. Based on the story the student reads, an example of the third grade reading assessment questions is, "This story mainly tells – (a) how fish are different from people, (b) how many kinds of fish there are, (c) where fish can be found, (d) how fish swim." The reading tests for eighth grade (see Appendix B) are also given in three 35 minute sessions. One session has a longer passage than the first two, followed by 15-20 multiple choice questions. For example, based on the passage, a sample question might; "Paragraph 2 of this selection is mainly about – (a) how this holiday might have begun, (b) what the floats are made of, (c) when the holiday takes place, (d) what people eat during the holiday." The other two sessions have one passage with 15-20 multiple choice questions and one short answer question. An example of a short answer is, "Why are Albert Einstein and Jacques Cousteau remembered as great men? Use information from the passages and your own observations to support your answer." ISAT uses two forms of the reading test for eighth grade. Two reading passages are identical and one passage is different across the forms. Scores on the two forms are statistically equated using the one parameter "Rasch" model and then calibrated which places the difficulty of both sets on the same scale across test forms.

The reading passages and questions are designed to reflect two of the most frequent purposes of reading: (1) reading to gain information and (2) reading for the experience, or enjoyment (ISBE, 1999; ISBE, 2000; ISBE, 2002; ISBE, 2003). The

multiple-choice questions allow students to select one correct answer from four possibilities. The short answer questions require students to read and understand text and also analyze, evaluate, and interpret the text as a means of drawing conclusions. The levels of achievement on the reading rubric range from 0 to 4, with 4 being the highest possible score. Appendix C presents the ISBE achievement rubric for reading. Responses with a score of 0 indicate that the response does not effectively determine achievement in reading. Responses with scores of 1 and 2 indicate developing levels of achievement in reading. A score of 3 represents a developed level of achievement in reading. Responses with scores of 4 represent a well-developed level of achievement in reading (ISBE).

Minimal information is presented by the Illinois State Board of Education about the reliability of the ISAT, and no information was found with regards to the validity of the ISAT. Because the specific items used on each test are from a larger group of items, the consistency of test scores across items is of interest. According to ISBE (1999, 2000, 2002, & 2003), the internal consistency of the overall reading scores from third grade coefficient alphas ranged from .93 to .95, while eighth grade coefficient alphas ranged from .89 to .95. It should be noted that the internal consistency ratings were done within each year, not across the years; therefore, it is unknown if the ISAT was consistent across the years investigated.

The extended response items are affected by another source of variance, particularly the readers, because different readers rate different responses. According to ISBE, two readers independently rated 10% of the responses across grades and prompts. For third grade, the raters agreed exactly approximately 61% of the time, and agreed

within one point, approximately 97% of the time (ISBE). The eighth grade raters agreed exactly approximately 71% of the time, and within one point, approximately 99% of time (ISBE).

### Procedure

Telephone, letter (see Appendix D), and personal contacts were used to obtain data from the school district. The superintendent of the district approved the use of anonymous ISAT data for third and eighth grades across four school years, 1999, 2000, 2002, and 2003. The data from 2001 were not used because that was the year the district transitioned from the traditional calendar to a year-round calendar, and it was believed that this was a confound to the study because that year's calendar was neither traditional nor year-round, instead it was assumed to be a period of adjustment to the transition.

Those students who did not have data available for the ISAT reading scale score, gender identification, or IEP status were excluded.

Finally, data for each student were entered into the SPSS statistical program by year, school calendar, and grade level. Data also included ISAT scale score, gender, and IEP status. These data are presented in Table 1.

## Design and Data Analysis

This is a longitudinal factorial design. The independent variables are the type of school calendar (Traditional or YRE), gender, grade level and eligibility for special education services; and the dependent variable is students' ISAT score in reading. Data analysis included a four-way ANOVA to compare students' ISAT Scale reading scaled score by type of calendar (traditional vs. YRE), year (1999, 2000, 2002 and 2003), gender, IEP status, and grade level (third and eighth).



# Results

A four-way analysis of variance was conducted on ISAT Reading Scale Scores. Type of calendar, student's grade level, gender, and IEP status were used as the predictors. At an alpha level of .01, results indicate that there were no significant four-way or three-way interactions. Only the two-way interaction of grade and IEP status was found to be significant. F(1, 865), p = .00. This interaction accounted for 1.50% of the total variance. Students with an IEP in third grade (M = 153.02, SD = 8.91) scored higher than students with an IEP in eighth grade (M = 140.96, SD = 8.25). However, students with no IEP in third grade (M = 162.38, SD = 13.11) had reading scores that were comparable with non-IEP students in the eighth grade (M = 159.57, SD = 11.67).

#### Discussion

The present study set out to determine if YRE influenced ISAT Reading achievement scores. In this study, YRE did not influence ISAT reading achievement scores. This is not consistent with the current literature that shows some positive effect of YRE on school achievement. Previous research has reported ambiguous to minimally positive effects of a modified school calendar (e.g., Cooper et al., 2003; Kneese, 1996). Kneese noted that while YRE had an overall positive effect on student achievement, these results were minimal and educationally insignificant. Other studies that have examined modified school calendars have noted difficulty in making inferences due to poor research designs (Cooper et al; Kneese).

Differences in the results of this study and the studies that found higher achievement in YRE students may be due to differences in definitions of YRE, methodology, and sample size of students with IEPs. Given that there are so few studies on YRE and so many versions of YRE (i.e., single-track vs. multi-track; 45/15 vs. 60/20), it is difficult to find studies that are comparable, and many system level variables could not be controlled. Some schools require students who are not achieving to attend intersessions while others do not. Additionally, differences in the definition of YRE and factors that other researchers have considered as important when studying the effects of a modified school calendar, such as teacher and student motivation and community attitudes (Cooper et. al., 2003; Ferguson, 1999; Kneese, 1996; Valentine et al., 2003) were not investigated in this study. Thus, no specific conclusions about the effects of YRE can be made based on the present findings.

There are many aspects of education other than school calendar that impact learning and it is important to note the influence of parents, teachers, and school structure on student learning. Teacher improvement in controlling classroom behavior can influence positive changes in student learning, and lead to school improvement (Teddlie, Stringfield, & Burdett, 2003). According to Teddlie, Kirby, and Stringfield (1989), effective schools displayed more evidence of effective teaching characteristics.

Characteristics of effective teachers' classrooms that were found to positively impact student achievement included increased time on task, more independent practice, high expectations of teachers, minimal interruptions, implementation of classroom discipline plan, and friendly ambience.

Research has shown that parent involvement has a positive influence on student achievement (Bird 2003). Austin (1979) cited studies that found other factors that positively impact student achievement. These factors included, but were not limited, to family background, student's sense of control, strong principal leadership, higher expectations of principals and teachers, more satisfactory parent-teacher relationships, and a longer instruction day, with no mention of the type of school calendar. The results of the present study may have been impacted by any, or all, of these factors.

Each state and school district has different standards for teachers and students as well as criteria for determining which students qualify for special education. According to Teddlie, Stringfield, and Burdett (2003), each state in the United States of America is responsible for its own educational system, and there are always numerous innovations being implemented, making it difficult to determine what impacts student achievement. The differences between states and school districts are also apparent when examining

criteria for determining which students qualify for special education services. It is almost impossible to know if students placed in special education are really learning disabled, or if other factors, such as home environment, student motivation, and parents' views of education may be influencing their learning.

An interaction was found implying that students receiving special education services in third grade have statistically significant higher ISAT reading scores than students receiving special education services in eighth grade. These findings are consistent with previous studies indicating that students in special education fall progressively further behind (e.g., Gottesman, 1979; McKinney & Feagans, 1984). Although the decline in scores for students receiving special education services are commensurate with other studies that investigated students receiving special education, the results of the present study could be exaggerated due to a small sample of students in the district who actually received special education. In other words, had one student scored extremely poorly, the results may have been negatively skewed.

These results may have occurred because the emphasis in special education has shifted from increasing academic achievement of learning disabled students to the level of their regular education peers to dependence on the modifications and accommodations they receive through special education programming (Kauffman, et al., 2004). Instead of teaching students how to learn more efficiently, schools are now providing accommodations, like additional time to complete assignments, which allows students to fall further behind. Orlando and Lynch (1974) noted that special education classes are not developed to meet student's needs, but rather, are usually a diluted version of the general curriculum.



At the time of this study, the year-round calendar had only been implemented for two years. If the school district, parents, teachers, and students had more time to adapt to the new calendar, results may have been different. Also, it is important to note that the data for this study were specifically from one school district in Illinois. How well the results generalize to other districts across Illinois or across the country are unknown. Due to the design of the present study, if any improvement or decline in reading achievement had been noted, it would have been difficult to determine whether the change was due to the modified calendar, or simply maturation in students or other changes in the district.

The present study focused only on one dependent variable (reading ISAT scores) to determine the effects of YRE, because the ISAT reading test was given to the students in the district over the years that were included. Additional variables could have been considered, such as math and science scores, or district wide test scores that are more aligned with the district's curriculum, as opposed to a state-wide test, to determine the effects of YRE on this particular district.

Another variable that may have been considered was the demands of *No Child Left Behind Act*, implemented by President George W Bush, on January 8, 2002. This law included increased accountability for states, school districts, and schools; greater choices for parents and students; more flexibility for states and local educational agencies for use of Federal education monies; and a stronger emphasis on reading (United States Department of Education, 2002). This law was implemented when the school district transitioned from TSY to YRE. The impact of the demands this law may have influenced the results of the present study.



Given the limitations of this study, discussed above, and the limited amount of research about YRE in general, there are several areas for future researchers to examine and explore. The next step for research would be to identify variables that mediate student achievement, such as teacher and student motivation, interventions used in the classroom, and parent support. It would also be worth while to investigate other areas of student achievement, such as math and science. The investigation of demographic issues and how they relate to student achievement could provide more insight about the types of populations YRE could benefit. Studies of schools that have had a year-round calendar for a longer period of time are also needed.

Schools would benefit from studies evaluating the types of interventions that work with special needs students and how those can be effectively implemented with these groups of students. Findings from the present study as well as those reported by previous researchers (e.g., Gottesman, 1979; McKinney & Feagans, 1984) have concluded that placement in special education can be related to a decrease in the rate of student achievement. Special education should serve as means to fill the voids of regular education by providing instruction and intervention that meet the unique learning needs of the student to increase achievement, competence, and independence.

The hope of increasing student achievement is often used to encourage a district to move to a year-round calendar, but the results of this study and other studies of year-round education suggest otherwise. However, there may be other reasons a district would move to a year-round calendar, such as teacher, parent, and student preferences, potential cost savings, and space savings. According to Ferguson (1999), teachers' perceived benefits of YRE included: less review seemed necessary for students; giving more



frequent school breaks resulted in less fatigued and frustrated students and teachers; students demonstrated more positive attitudes; and the pace of the school year seemed to keep children in better spirits and encouraged learning. These factors may be enough reasons for a district to consider moving to a year-round calendar. Even if positive effects are shown due to a modified calendar, oftentimes it is quite small when compared to other effects associated with educational interventions (Cooper et. al., 2003).

The primary implications of this study, for the particular school district that provided date, are that currently there is no support for YRE for improving the reading achievement of students in the regular education or special education classrooms; and overtime students in special education are further falling behind their regular education peers. In light of these findings, it is prudent for schools to invest in strategies that have research support for increasing student achievement.

#### References

- Austin, G. (1979). Exemplary schools and the search for effectiveness. *Educational Leadership*, 97, 10-14.
- Ballinger, C. (1995). Prisoners no more. Educational Leadership. 28-31.
- Ballinger, C. (2000). Changing time: Improving learning. High School Magazine, 7, 5-8.
- Barber, R. J. (1996). Year-round schooling really works. Education Digest, 62, 31-33.
- Bird, V. (2003, September). Assessing the evidence on parental involvement. *Literacy: Today*, 20-21.
- Bourke, S. (1986). How smaller is better: Some relationships between class size, teaching practices, and student achievement. *American Educational Research Journal*, 23, 558-571.
- Cooper, H., Valentine, J. C., Charlton, K., & Melson, A. (2003). The effects of modified school calendars on student achievement and on school and community attitudes. *Review of Educational Research*, 73, 1-52.
- Domina, T. (2005). Leveling the home advantage: Assessing the effectiveness of parental involvement in elementary school. *Sociology of Education*, 78, 233-249.
- Englund, M. M., Luckner, A. E., Whaley, G. J. L., & Egeland, B. (2004). Children's achievement in early elementary school: Longitudinal effects of parental involvement, expectations and quality of assistance. *Journal of Educational Psychology*, 96, 723-730.
- Failing teachers will soon be able to "leave with dignity." (2003, January 31). *Education: The Professional's Voice*, p. 1.



- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement:

  A Meta-Analysis. *Educational Psychology Review*, 13, 1-22.
- Gottesman, R. L. (1979). Follow-up of learning disabled student. *Learning Disability Quarterly*, 2, 60-69.
- Hood, S. & Freeman, D. J. (2000). Contrasting experiences of white students and students of color in a year-round high school. *Journal of Negro Education*, 67, 349-360.
- Illinois State Board of Education (1999). *The Illinois Sate Assessment 1999 Technical Manual*. Springfield, IL: Author.
- Illinois State Board of Education (2000). *The Illinois Sate Assessment 2000 Technical Manual*. Springfield, IL: Author.
- Illinois State Board of Education (2002). *The Illinois Sate Assessment 2002 Technical Manual*. Springfield, IL: Author.
- Illinois State Board of Education (2003). *The Illinois Sate Assessment 2003 Technical Manual*. Springfield, IL: Author.
- Illinois State Board of Education (2006). *ISAT Sample Book: Grade 3*. Springfield, IL: Author.
- Illinois State Board of Education (2006). *ISAT Sample Book: Grade 8.* Springfield, IL: Author.
- Kauffman, J. M., McGee, K., & Brigham, M. (2004). Enabling or disabling?
  Observations on changes in special education. *Phi Delta Kappan*, 85, 613-620.
- Kerry, T. & Davies, B. (1998). Summer learning loss: The evidence and possible solution. Support for Leaning, 13, 118-122.

- Kneese, C. C. (1996) Review of research on student learning in year-round education. *Journal of Research and Development in Education*, 29, 60-72.
- Lazarus, S. S. (2003, April). Preparing rural educators to teach students in an era of standards-based reform and accountability. Paper presented at A National Research Workshop sponsored by The Economic Research Service: *Promoting* the Economic and Social Vitality of Rural America: The Role of Education, New Orleans, LA.
- McGlynn, A. (2002). Districts that school year-round. School Administrator, 59, 34-38.
- McKinney, J. D., & Feagans, L. (1984). Academic and behavioral characteristics of learning disabled children and average achievers: Longitudinal studies. *Learning Disability Quaterly*, 7, 251-265.
- National Reading Panel (2000). Report of the National Reading Panel: Teaching

  Children to Read. National Institutes of Health.
- Opheim, C., Hopkins-Mohajer, K., & Read. R. W. Jr. (2001). Evaluating year-round schools in Texas. *Education*, *116*, 115-120.
- Orlando, C., & Lynch, J. (1974). Learning disabilities or educational casualties? Where do we go from here? *The Elementary School Journal*, 74, 461-467.
- Peltier, G. L. (1991). Year-round education: The controversy and research evidence.

  NAASP Bulletin (September): 120-129.
- Rosenshine, B., & Furst, N. (1971). Research in teacher performance criteria. In B. O. Smith (Ed.), *Research in teacher education: A symposium*. Englewood Cliffs, NJ: Prentice-Hall.

- Rowan, B., Bossert, S. T., & Dwyer, D. C. (1983) Research on effective schools: A cautionary note. *Educational Researcher*, 12, 24-31.
- Suh, T., & Fore, R. (2002). The national council on teacher quality: Expanding the Teacher Quality Discussion. Washington, DC: National Council on Teacher Quality. (ERIC Document Reproduction Service No. ED477730)
- Teddlie, C., Kirby, P. C., & Stringfield, S. (1989). Effective versus ineffective schools:

  Observable differences in the classroom. *American Journal of Education*, 97, 221-236.
- Teddlie, C., Stringfield, S., & Burdett, J. (2003). International comparisons of the relationships among educational effectiveness, evaluation, and improvement variables: An overview. *Journal of Personnel Evaluation in Education*, 17, 5-20.
- United States Department of Education. (2002). *The No Child Left Behind Act of 2002*.

  Retrieved April 23, 2007 from United States Department of Education Web site <a href="http://www.ed.gov/nclb/overview/intro/execsumm.html">http://www.ed.gov/nclb/overview/intro/execsumm.html</a>



Figure 1

Estimated Means of Reading Scale Score

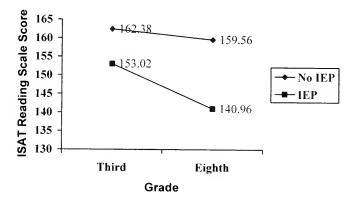




Table 1
Student Demographics

		Third	l Grade	
	Traditional C	Calendar	Year-Round	Calendar
Sex	No IEP	IEP	No IEP	<u>IEP</u>
Male	98	13	94	10
Female	102	8	77	12
		<u>Eightl</u>	h Grade	
	Traditional (	Calendar	Year-Round	Calendar
Sex	No IEP	IEP	No IEP	1EP
Male	92	19	101	14
Female	104	8	120	9



Table 2

Analysis of Variance on Reading Scale Score

Source	df	F	p	
Calendar (C)	1	2.65	.10	
Grade (G)	1	31.67**	.00	
Sex (S)	1	1.20	.27	
IEP Status (I)	1	109.17**	.00	
$\mathbf{C} \times \mathbf{G}$	1	0.62	.43	
$C \times S$	1	0.31	.58	
$G \times S$	1	0.05	.83	
$S \times I$	1	0.91	.34	
$C \times 1$	1	3.05	.08	
$G \times I$	1	13.27**	.00	
$C\times G\times S$	1	1.72	.19	
$C \times G \times 1$	1	0.21	.65	
$C \times S \times I$	1	0.01	.94	
$G \times S \times 1$	1	0.07	.79	
$C\times G\times S\times I$	1	0.78	.38	

<sup>\*\*</sup>p < .01



### Appendix A

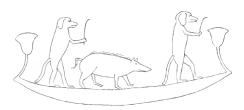
### Sample Third Grade ISAT Reading Passage with Extended Response

#### Reading

This is an article about the unknown talents of pigs. These animals have helped humans for millions of years.

### 40 Million Years of Pigs

by Alice L. Hopf



- Pigs have been on our planet for about 40 million years and there has been very little change in them during that time. Even their habit of eating almost anything has stayed the same.
- 2 Farmers have raised pigs for many thousands of years. Bones of tame pigs have been found in houses from the New Stone Age. This was the time between 5,000 and 10,000 years ago, when people began to settle down to raise crops and live in small communities.
  - The pig is a hoofed animal, an ungulate, and belongs to a large group that scientists call the even-toed ungulates. Cattle, deer, goats, sheep, and camels are also in this group. These animals have kept the two largest toes—the

- second and third—to run on. The weight of the animal comes down between these two toes, which have grown into hoofs. The other toes have become weak and stopped growing. In some cases they have disappeared.
- Perhaps one reason the pig has stayed alive through all these years is that it is a fighter. It has a set of sharp tusks and a deadly bite. It often fights rather than running away. Even a tame pig is considered a risky animal to approach in an unfriendly way.
- The pig is so popular as a source of food that only now and then has it been used in other ways. The ancient Egyptians used the pig to help in their planting. Their little hoofs made holes just the right size and depth for the

16

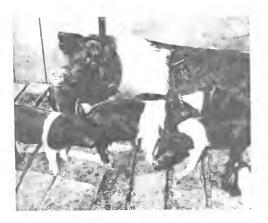
ne ne



Reading



- seeds, and the animals were moved back and forth over the land to be planted. This was called "treading the seed."
- Later, other people found useful work for pigs. In England long ago, there were laws against hunting. Deer were thought of as the property of the lord who ruled the area. Peasants were forbidden to hunt anything except small animals. For this reason they could not keep large dogs. Instead, they trained the pig as a hunting companion. Pigs have a good sense of smell. They are very smart animals—some say smarter than dogs.
- In France, pigs are also used to look for truffles, a kind of black mushroom that grows underground. Truffles are very expensive and delicious to eat. Pigs use their snouts to dig up roots to eat, and they have been trained to smell out this treasure. Usually the pig has a ring around its snout to keep it from eating the truffles before the collector can put them in a basket.
- 8 Pigs have also been trained as circus animals. They can do anything that dogs can do. They can jump through hoops, dance, pull a cart, and walk a tightrope. They can even do things dogs



IL05-P3 3S8

17

Sample was taken from ISAT Sample Book: Grade 3.





would not figure out, like opening the bar on a door.

Even though pigs have so much talent, people still have some bad opinions of them. To call another person a pig is a serious insult in almost every language. Our day-to-day language is full of sayings like "dirty as a pig," "greedy as a pig," and "don't be a pig." All of this is more an insult to the pig than to the person. Pigs are not naturally dirty. A domestic pig becomes dirty when it is shut up in a pen full of garbage. And a

pig is no greedier than any other animal. A cat or a dog will overeat—but not a pig. If it digs around in its food, it is to find the small pieces it especially likes, rather than simply eating everything in sight. And the pig is a good-natured animal. If it is treated with kindness, it will do almost anything that is asked of it.

The pig has come a long way. But it is still independent, curious, and brave—as well as smart. This is why it has lived tor millions of years.

"40 Million Years of Pigs" by Alice Lightner Hopt, is adapted by permission from 40 MilLION YFARS OF PiGS from the May 1985 issue of Cricket Magazine as adapted from "PIGS Wild and Tame" copyright  $\tilde{\xi}$  1979 by Alice Lightner Hopt

18

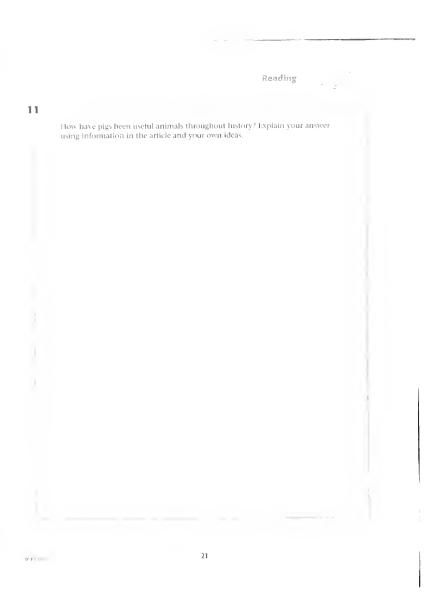
(L06-P3 158

Reading 1 What will a pig probably do if According to the article, someone threatens it? which of the following is true about pigs? Run Fight They have a poor sense of Dig smell. They are used for hunting deer. Jump They have changed little over timé. They are born with five toes. 5 A pig is a risky animal to approach in an untriendly 2 way. Which of the following How do scientists know that means the same as risky? people raised pigs thousands of years ago? Large Unpopular Greedy There are old stories about circus acts with pigs. Unsafe Scientists know cattle and pigs have the same kinds of feet. The way people hunt for truffles has not changed in years. Scientists have found the bones of pigs in very old ruins. 3 Which of the following animals has toes like a pig? Bird Lizard Camel Squirrel

Sample was taken from ISAT Sample Book: Grade 3.

L05 P3 3SS

19



Sample was taken from ISAT Sample Book: Grade 3.



#### Appendix B

#### Sample Eighth Grade ISAT Reading Passage with Extended Response

Some people have tremendous gifts, but are afraid to reveal them to others. This story, written by Bob Greene, tells of one man who lets his lear of people's reactions prevent him

## The Hidden Songs of a Secret Soul

by Bob Greene

1 Lenny was the loneliest of dreamers. No one knew; we wouldn't have known, either, except for the fact that the afternoons got long, and the only way to make it through was to talk. After a time we even talked to Lenny.

from taking a chance at life.

- 2 He worked in the shipping room of a bottling plant. It manufactured soda pop. Lenny was a thin, slight man in his middle forties with a stainmer and a sad face. We worked at long tables. Lenny was the only full-timer at our table; the rest of us were in school, and we came in whatever afternoons we could spare and picked up pocket money for the weekends. For us, the job was a dreary way to kill time. For Lenny, it was his sustenance.
- The other full-timers in the room fiked to kid Lenny. Most of them were in their twenties, and they passed the day with talk of women. Lenny had no wife or family, and he never spoke of a woman. So when the full-timers became bored with their own talk, they would call over to our table and tease Lenny some. They would ask him about his romances, and when he would become embarrassed and turn away and try not to answer, they would not let up until they became bored with bothering him. They didn't mean anything by it.
- 4 He never said much, and for awhile we didn't say much to him. We would come in after classes, nod hello to him, and start loading boxes. Lenny had spent

- most of his life being invisible; we sensed that without really thinking about it. He just seemed happy that we didn't tease him like the others did.
- One afternoon, though, he started to talk. He didn't slow up what he was doing, but as he worked he began to ask us about the classes we took in school, the courses we were studying. He asked if any of us were studying English as a major; he wanted to know if any of us were studying the great poets.
- None of us thought much about the questions at first; I know I didn't. But after that, a couple of times every week, he would ask the same things. It was always about the poets. On the way back home in the evenings, we would talk about it, and wonder what he meant. One night we determined we would find out.
- 7 So the next day, at break time, we asked Lenny to sit down for coffee with us. We had never had coffee with Lenny before; usually he would disappear on his break. One of us asked him about the poets.
- 8 "I just wondered," Lenny said. But we pressed.
- 9 He avoided it, and so we dropped it and linished our cups, Just before we were due back at our table, Lenny said, "Sometimes I write poems."
- 10 We went back to work and tried to make him tell us more. It was so unlikely, the idea of Lenny who seldom

16

1.06-A2-85B



- had the nerve to speak, and had trouble when he did, spending time committing his thoughts to paper. When we attempted to question him further, he became uncomfortable and flushed.
- "Don't talk so loud," he pleaded. "The others will hear."
- 12 We asked him that day if he would let us see his poems, and he said no. We kept if up, though; we wanted to see. Finally, he said that he would like to let us see them, but that he was afraid that if he brought them in, the others would find out and make tun of him.
- 13 We told him we would go with him to see the poems. He said he would think about it, and we did not let him forget. One day he said that we could come home with him it we wished.
- 14 After work we rode the elevated train. He lived in one room. There were not enough spaces for us to sit. He brought out a large scrapbook. The poems were inside.
- They were written all in longhand, with a fountain pen. Even before we started to read them, they looked elegant. Lenny's hand moved with strokes full of flourish and style, confident and strong while Lenny was timid and quiet. And when we did begin to read, the poems were beautiful. The verses were long, and rich with imagery

- and detail. They told of love, and of spiritual triumphs, and of life in faraway places. They were music. We must have sat and read for an hour, saying nothing. When we finished and looked up, there was Lenny, in his rented room, staring away from us.
- "Please never say anything about this to the others," he said.
- We tried to tell him how good the poems were, how he should be proud of what he had done, and not ashamed to let anyone know, but he cut us off.
- 18 "Please," he said. "I have to work there."
- 19 We went home, and the next day Lenny let us know, without a word, that we were not to talk about the poems again. For a lew months we continued to work, and Lenny continued to take the joking from the other full-timers. Then school ended for the summer, and we left the joh, and Lenny. We never went back.
- 20 The reason I am thinking about this is that I saw him the other day. There was no mistake; it was he. It was on a crowded street, and there was Lenny. I motioned to him, and called his name, and started walking toward him. He saw me; I know he did. He turned around very quickly and walked away, and I knew that I was not supposed to follow.

\*The Hidden Songs of a Secret Soul" by Bob Greene From *The Chicago Tribune*, copyright © 1975, Tribune Media Services, Inc. All Rights Reserved, Reprinted with permission

17

1.45.99

Sample was taken from ISAT Sample Book: Grade 8.



1

Which statement helps the reader better understand the meaning of the sentence, "Lenny was the loneliest of dreamers"?

- A Lenny is often distracted at the factory.
- B Lenny is surrounded by many girlfriends.
- C There is more to Lenny than people realize.
- D The college will never allow Lenny to teach.

2

What is the point of view in this story?

- A First person
- **B** Second person
- € Third person.
- D. Omniscient person

3

Why do the students work part-time?

- A To meet new people
- B To pay for college
- C to learn new skills
- D To earn spending money

4

Which example most closely reflects the main idea in the story about Lenny?

- A Person who is afraid to ride a very tall roller coaster
- B Gardener who plants incredible gardens for everyone to enjoy
- Wonderful singer who only has courage to sing in the shower
- D Person who enjoys washing the windows of skyscrapers

5

The narrator describes Lenny's handwriting as "full of flourish and style." What does flourish mean?

- A Sloppy handwriting
- B Decorative detail
- Challenging phrases
- **D** Bold statements

18 L06-A2-858

Sample was taken from ISAT Sample Book: Grade 8.



11

Why is Lenny so afraid to share his poetry with other people? Use information from the story and your own observations and conclusions to support your answer.

20

11 IG-A2-8S

Sample was taken from ISAT Sample Book: Grade 3.



### Appendix C

## ISAT Reading Extended Response Rubric

2007 ISAT Grade 8 Sample Book

### Reading Extended-Response Scoring Rubric

Reserve is a typical portion rathermore from explicational amplicitly in the reset. Readers in some notional on to the repression of the second of the reset of t

Score	Criteria				
	aller demonstrate as a country under conduct a family of the formation of the test for forward or to the description and mentionly confirmation to the test for forward or the description of the descripti				
4	<ul> <li>Reader uses inform that to in the second principal signaficant investors in make connection the industrial of contract in legically through another contract in measurement or comparison contract.</li> </ul>				
	<ul> <li>Exacter uses reservant and accurate reservices, most are specific and fully supported.</li> </ul>				
	<ul> <li>k inder not grafts into preta non of the text with less based apport inhalanced</li> </ul>				
	<ul> <li>Fit demonstrates: a mate understanding of information in the text by focusing an above described in section of a plicit modern.</li> </ul>				
3	3 It is not unature from the reliability and analysis of make connections to other situations of context logically only against through any letter in Latinum infection on comparison contrast.				
	<ul> <li>Fig.) let run prates and audinaut references i ame are specific strine may be general and certailly supported.</li> </ul>				
	<ul> <li>Reader partially integrate interpretation of the level with teach based support.</li> </ul>				
	<ul> <li>The lamide monatrates an accurate but innited understanding of the text</li> </ul>				
2	til all constructions from the restricted by supplied interpretations of the splitting drouble. Sungaugmäch in a construction of the material limited in one choose out the estimated in the formation of the construction.				
-	· "early are involved and an invited reference,				
	<ul> <li>Feader generalizes, with a softwarating leaders, may have gap.</li> </ul>				
	<ul> <li>Ender drimans rates little acons anderst indusy of the rest, may be macroente.</li> </ul>				
1	<ul> <li>Enjoy make a little or a contempretation of the style.</li> </ul>				
	Finadornia in the terences on the references are inaccurate.				
	- 1. adors in spanse is insufficien to show that ordena are met				
0	ender's response to appoint or does not address the take				
U	Service is insufficient it, show that criteria are met				

30

Sample was taken from ISAT Sample Book: Grade 3 and ISAT Sample Book: Grade 8 (2006).

### Appendix D

#### Correspondence with Superintendent

# RIVERTON COMMUNITY UNIT SCHOOL DISTRICT #14

Thomas H. Mulligan, Superintendent PO Box 1010 • 6425 Old Rt. 36 • Riverton, IL 62561 Phone 217.629.6009 • FAX 217.629.6008 tmulligam@rivertonschools.org



May 1, 2006

Stacey Binegar, Principal PO Box 470 209 North 7th Street Phone 217.629.6001 FAX 217.629.6023 sbinegar@rivertonschools.org

Lasma - A.

Fred Lamkey, Principal PO Box 530 1014 East Lincoln Street

1014 East Lincoln Street Phone 217.629.6002 FAX 217.629.6017 flamkey@riverionschools.org

HIGH SCHOOL Bill Lamkey, Principal PO Box 560 841 North 3rd Street Phone 217.629.6003 FAX 217.629.6020 blamkey@rivertonschools.org

2UILDING & GROUNDS/ TRANSPORTATION Bill Geiger, Director PO Box 530 1014 East Lincoln Street Phone 217.629.6002 FAX 217.629.6002 FAX 217.629.6003 To whom it may concern,

This letter is to confirm that Kristy Marlett has been given permission to use the local achievement and state test data from the Riverton School District, as part of her research study. The testing information that has been provided to her keeps all information about individual students confidential, in accordance with the student records act.

Sincerely,

Dr. Thomas H. Mulligan, Ph.D. Riverton CUSD #14





The HF Group
Indiana Plani
VT 098516 G 25 03
6/15/2007

